

computer"). Independent claim 19 is directed toward "A method for building a control system for use on a real-time computer" and it is believed this claim (and claims 20 and 21) is better grouped in Group II along with claims 15 and 22. The rest of the independent claims of Group III are: claim 23 (defining a mode), claim 38 (defining an image) and claim 45 (mapping an image). It is submitted that claims 19-21 (building a control system) are better suited for examination if grouped with the other claims of Group II.

A five-way restriction requirement has been issued. Applicant respectfully traverses the restriction requirement because it is believed that various of the groups can be combined without any serious burden to the Examiner. MPEP §803 states: "If the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to distinct or independent inventions."

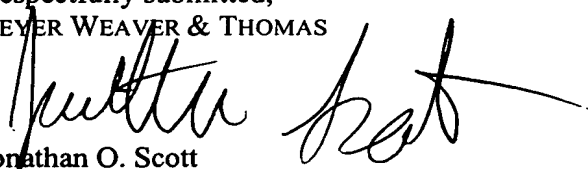
Specifically, it is believed that Groups I and II (claims 1-7, 8-14, 15-18, 19-21 and 22) can be examined together as they include similar features that will ease the burden on the Examiner. Of Group I, claim 1 is directed at a data structure for "building a control system" and requires a "data flow object" that provides "sampled-data processing for said control system" and "a state machine object" that provides "event-driven processing for said control system." Claim 8 of Group I includes these elements as well. Similarly, claim 15 of Group II is directed at a control system that includes a data flow component and a state machine component that proved these types of processing, respectively. Claim 19 is a method for building a control system that also includes a data flow diagram and a state machine component with these types of processing. Claim 22 is a method for executing a control system also with a data flow component and a state machine component with these types of processing. Thus, as these claims all relate to a control system, and all include these similar features, it is believed that all of the claims of Groups I and II can be combined and examined together.

In addition, it is believed that Groups III and IV (claims 23-30, 38-44, 45, 31-36 and 37) can be examined together as they include similar features that will ease the burden on the Examiner. Of Group III, the claims relate in general to operation of a control system; claim 23 relates to defining a mode for use in execution, claim 38 relates to defining an executable image for the control system, and claim 45 relates to mapping an executable image. In general, each of the claims involve receiving components and then performing an operation for each component.

Similarly, Group IV also relates to operation of a control system. Claim 31 relates to mapping a thread of a processor (used in execution), and claim 37 is a method of mapping threads. Like the claims of Group III, claims 31 and 37 of Group IV also require steps of receiving components and then performing an operation for each component. Thus, as these claims all relate to operation and execution of a control system, and include similar features, it is believed that all of the claims of Groups III and IV can be combined and examined together.

In conclusion, Applicant desires that Groups I and II be examined together, and that Groups III and IV be examined together. In addition, it is believed that claims 19-21 are better placed in Group II rather than in Group III. Reconsideration of this application is respectfully requested. If the Examiner believes a telephone conference would in any way expedite prosecution, please do not hesitate to telephone the undersigned at (612) 252-3330.

Respectfully submitted,
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